Please amend the claims as follows:

1. (original) A bioresorbable, self-expanding stent comprising:

a cylindrical sleeve having a first end and a second end;

a latticed network disposed between said first end and said second end of said cylindrical sleeve;

said latticed network formed from a plurality of monofilaments, wherein at least two of said monofilaments are braided in an alternating braid pattern; and

said plurality of monofilaments comprises at least one biocompatible polymer, and said cylindrical sleeve having a controllable in vivo lifetime.

2. (original) The bioresorbable, self-expanding stent of claim 1 wherein said plurality of monofilaments ranges from 30 to 48 monofilaments.

3. (original) The bioresorbable, self-expanding stent of claim 2 wherein said plurality of braided monofilaments comprise 40 monofilaments.

4. (original) The bioresorbable, self-expanding stent of claim 1 further including at least a single strand shift between each adjacent monofilament.

5. (original) The bioresorbable, self-expanding stent of claim 1 further including an as-braided braid-crossing angle ranging from approximately 100° to 150°.

6. (original) The bioresorbable, self-expanding stent of claim 1 further including an as-braided braid-crossing angle of approximately 110°.

7. (original) The bioresorbable, self-expanding stent of claim 1 further including a post-annealed braid-crossing angle ranging from approximately 125° to 150°.

8. (original) The bioresorbable, self-expanding stent of claim 1, wherein said braid pattern is selected from the group consisting of under-one-over-one, under-one-over-two, under-one-over-three, under-two-over-two, under-two-over-three, and under-three-over-three.

9. (original) A bioresorbable, self-expanding stent comprising:

a cylindrical sleeve having a first end and a second end;

a latticed network disposed between said first end and said second end of said cylindrical sleeve;

said latticed network formed from a plurality of monofilaments helically wound about a longitudinal axis of said cylindrical sleeve, wherein approximately one-half of said plurality of monofilaments are wound in a clockwise direction and approximately one-half of said plurality of monofilaments are wound in a counter-clockwise direction, and said plurality of monofilaments are braided in an alternating braid pattern; and

said plurality of braided monofilaments comprises at least one biocompatible polymer, and said cylindrical sleeve having a controllable in vivo lifetime.

10. (original) The bioresorbable, self-expanding stent of claim 9 wherein said plurality of monofilaments ranges from 30 to 48 monofilaments.

11. (original) The bioresorbable, self-expanding stent of claim 10 wherein said plurality of braided monofilaments comprise 40 monofilaments.

12. (original) The bioresorbable, self-expanding stent of claim 9 further including a single strand shift between each adjacent monofilament.

13. (original) The bioresorbable, self-expanding stent of claim 9 further including an as-braided braid-crossing angles ranging from approximately 100° to 150°.

14. (original) The bioresorbable, self-expanding stent of claim 9 further including an as-braided braid-crossing angle of approximately 110°

15. (currently amended) The bioresorbable, self-expanding stent of claim 9 further including a[[n]] post-annealed braid-crossing angle ranging from approximately 125° to 150°.

16. (original) The bioresorbable, self-expanding stent of claim 9, wherein said braid pattern is selected from the group consisting of under-one-over-one, under-one-over-two, under-one-over-three, under-two-over-two, under-two-over-three, and under-three-over-three.

17. (currently amended) A bioresorbable, self-expanding stent comprising:

a cylindrical sleeve having a first end and a second end;

a latticed network disposed between said first end and said second end of said cylindrical sleeve;

said latticed network formed from approximately forty monofilaments helically wound about a longitudinal axis of said cylindrical sleeve, wherein approximately fifteen to twenty of said monofilaments are wound in a clockwise direction and approximately fifteen to twenty of said monofilaments are wound in a counter-clockwise direction, wherein said approximately thirty to forty monofilaments are braided in an alternating braid pattern, wherein said braid pattern is selected from the group consisting of under-one-over-one, under-one-over-two, under-one-over-three, under-two-over-two, under-two-over-three, and under-three-over-three[[.]]; and

said plurality of braided monofilaments comprises poly-L-lactide polymers, and said cylindrical sleeve having a controllable in vivo lifetime.

18. (original) A bioresorbable, self-expanding stent comprising:

a tubular sheath having a first end and a second end; and

a fenestrated walled surface disposed between said first end and said second end, said fenestrated walled surface comprised of at least one biocompatible polymer, and said fenestrated walled surface having a controllable in vivo lifetime.

19. (original) The bioresorbable, self-expanding stent of claim 18 wherein said at least one biocompatible polymer is polydioxanone.

20. (original) The bioresorbable, self-expanding stent of claim 18 wherein said tubular sheath has an inner diameter ranging from 12 mm to 18 mm.

21. (original) The bioresorbable, self-expanding stent of claim 18 wherein said tubular sheath has an inner diameter of approximately 15 mm.

22. (original) A bioresorbable, self-expanding stent comprising:

a tubular sheath having a first end and a second end, said tubular sheath having an inner diameter ranging from 12 mm to 18 mm; and

a fenestrated walled surface disposed between said first end and said second end, said fenestrated walled surface comprised of at least one biocompatible polymer, and said fenestrated walled surface having a controllable in vivo lifetime.

[[22]]23. (currently amended) The bioresorbable, self-expanding stent of claim 22 wherein said tubular sheath has an inner diameter of approximately 15 mm.

[[23]]24. (currently amended) The bioresorbable, self-expanding stent of claim 22 wherein said at least one biocompatible polymer is polydioxanone.

[[24]]25. (currently amended) A bioresorbable, self-expanding stent comprising:

a tubular sheath having a first end and a second end, said tubular sheath having an inner diameter of approximately 15 mm; and

a fenestrated walled surface disposed between said first end and said second end, said fenestrated walled surface comprised of polydixanone, wherein said tubular sheath has a controllable in vivo lifetime.

[[25]]26. (currently amended) A method of producing a bioresorbable, self-expanding stent comprising:

providing biocompatible, bioresorbable monofilaments;

braiding said monofilaments into a latticed network, said latticed network having an alternating braiding pattern; and

annealing said latticed structure.

[[26]]27. (currently amended) The method of claim [[25]]26 further comprising:

adjusting annealing conditions to achieve a predetermined in vivo functional life.

[[27]]28. (currently amended) The method according to claim [[25]]26 wherein said biocompatible, bioresorbable monofilaments are poly-L-lactide monofilaments.

[[28]]29. (currently amended) The method according to claim [[25]]26 wherein said annealing step further includes heating said latticed structure to 90°C in an inert atmosphere.

[[29]]30. (currently amended) The method according to claim [[28]]29 wherein said inert atmosphere is selected from the group consisting of nitrogen, argon, and helium.

[[30]]31. (currently amended) The method according to claim [[28]]29 wherein said inert atmosphere comprises a high vacuum.

[[31]]32. (currently amended) The method according to claim [[25]]26 further comprising:

axially compressing said latticed structure by 30% to 60% prior to said annealing step.

[[32]]33. (currently amended) The method of claim [[25]]26 further comprising:

exposing said annealed latticed structure to gamma irradiation.

[[33]]34. (currently amended) The method according to claim [[32]]33 wherein said latticed structure is exposed to approximately 35 kGy to 75 kGy total dose of gamma irradiation.

[[34]]35. (currently amended) A method of producing a bioresorbable, self-expanding stent comprising:

providing biocompatible, bioresorbable monofilaments;

braiding said biocompatible, bioresorbable monofilaments into a latticed structure, wherein said biocompatible, bioresorbable monofilaments are woven in an alternating braiding pattern; and

annealing said latticed structure at approximately 90°C in an inert atmosphere wherein said inert atmosphere is selected from the group consisting of nitrogen, argon, helium, and high vacuum.

[[35]]36. (currently amended) The method according to claim [[34]]35 further comprising:

axially compressing said latticed structure on a mandrel by 30% to 60% prior to said annealing step.

[[36]]37. (currently amended) The method according to claim [[34]]35 further comprising:

exposing said annealed latticed structure to gamma irradiation.

[[37]]38. (currently amended) The method according to claim [[36]]37 wherein said latticed structure is exposed to approximately 35 kGy to 75 kGy total dose of gamma irradiation.

[[38]]39. (currently amended) A method of producing a bioresorbable, self-expanding stent comprising:

(a) providing poly-L-lactide monofilaments;

(b) braiding said poly-L-lactide monofilaments into a latticed structure, wherein said poly-L-lactide monofilaments are woven in an alternating under-two-over-two pattern;

(c) axially compressing said latticed structure on a mandrel by 30% to 60%;

(d) annealing said latticed structure at approximately 90°C for at least one hour in an inert atmosphere, wherein said inert atmosphere is selected from the group consisting of nitrogen, argon, helium, and high vacuum; and

(e) exposing said latticed structure to approximately 35 kGy to 75 kGy total dose of gamma irradiation.

[[39]]40. (currently amended) A method of producing a stent comprising:

selecting a biocompatible, bioresorbable polymer;

forming a tubular sheath having fenestrations from said biocompatible, bioresorbable polymer; and

annealing said tubular sheath.

[[40]]41. (currently amended) The method according to claim [[39]]40 wherein said forming step further comprises injection molding or extruding said tubular sheath.

[[41]]42. (currently amended) The method according to [[39]]40 wherein said annealing step further comprises heating said tubular sheath to a temperature of approximately 75°C for approximately one to three hours.

[[42]]43. (currently amended) The method according to claim [[41]]42 wherein said annealing step further includes exposing said tubular sheath to an inert atmosphere inert atmosphere is selected from the group consisting of nitrogen, argon, and helium.

[[43]]44. (currently amended) The method according to claim [[41]]42 wherein said annealing step further includes exposing said tubular sheath to a high vacuum.

[[44]]45. (currently amended) The method according to claim [[39]]40 wherein said forming step further comprises laser cutting said fenestrations.

[[45]]46. (currently amended) A method of producing a stent comprising:

selecting a biocompatible, bioresorbable polymer;

forming a tubular sheath from a biocompatible, bioresorbable polymer;

cutting fenestrations into said tubular sheath; and

annealing said tubular sheath to a temperature of approximately 75°C for approximately one to three hours in an inert atmosphere.

[[46]]47. (currently amended) The method according to claim [[45]]46 wherein said annealing step further includes exposing said tubular sheath to nitrogen.

[[47]]48. (currently amended) The method according to claim [[45]]46 wherein said annealing step further includes exposing said tubular sheath to high vacuum.

[[48]]49. (currently amended) A method of producing a stent comprising:

providing polydioxanone polymers;

injection molding a tubular sheath from said polydioxanone polymers;

laser cutting fenestrations into said tubular sheath; and

annealing said tubular sheath at a temperature of approximately 75°C for at least one hour in an inert atmosphere of high vacuum or nitrogen gas.

[[49]]50. (currently amended) A bioresorbable, self-expanding stent comprising:

a cylindrical sleeve having a first end and a second end;

a latticed network disposed between said first end and said second end of said cylindrical sleeve;

said latticed network formed from approximately forty monofilaments helically wound about a longitudinal axis of said cylindrical sleeve, wherein approximately twenty of said monofilaments are wound in a clockwise direction and approximately twenty said monofilaments are wound in a counter-clockwise direction, wherein said approximately forty monofilaments are braided in an alternating under-two-over-two braid pattern; and

said plurality of braided monofilaments comprises poly-L-lactide polymers, and said bioresorbable stent having a controllable in vivo lifetime of at least two weeks.

[[50]]51. (currently amended) A method for using a bioresorbable, self-expanding stent comprising:

disposing said bioresorbable, self-expanding stent in a delivery system, said bioresorbable, self-expanding stent having a controlled in vivo lifetime;

inserting said delivery system into a constricted region within a body canal;

deploying said ~~bioresorable~~bioresorbable stent into said constricted region; and

allowing said bioresorbable stent to self-expand and restore patency of said constricted region.